

in length, and began to spin cocoons. They spun first a slight net, and covered it with their long hairs laid on lengthwise and lying smooth and flat. Through this net they pushed their short hairs at right angles, or nearly so, with the surface, so that these hairs stood up as if growing on the cocoons, and gave them a rough surface—like that of a head whose hair has been cut very short, but not shaved. The cocoons varied in length from $\frac{7}{8}$ inch to $1\frac{1}{8}$ inches. They were of a regular ovoid shape, and of a gray color from the black and white hairs of the larvae. Some were spun on the

side of the tin, some on the cloth over the top of the tin, and more on the under side of the leaves, though with no attempt to draw the leaf over the cocoon.

The hickory trees were so defoliated by these larvae this year, that I destroyed all but twenty of my brood, as soon I was sure what they were. Of the twenty none died.

Aug. 20. The pupa cast the larva-skin.

Pupa. $\frac{3}{8}$ inch long, smooth, stout, larger around the abdomen than around the thorax; with eyes and antennae well marked. Its color was bright tan. There was no anal hook.

A LIST OF SOME OF THE CATALOGUES AND LOCAL LISTS OF NORTH AMERICAN COLEOPTERA.—I (A.-G.).

BY JOHN HAMILTON AND SAMUEL HENSHAW.

In studying the distribution of certain of our species of Coleoptera it has been necessary to go over a considerable part of the American literature; when so doing a memorandum of all lists and catalogues was made and is now published as an aid to others engaged in similar studies.

Some of the lists contain so few species as at first sight to appear unworthy of note, but frequently they include some of the most interesting and valuable records; in fact the value of a local catalogue is often to be estimated not so much by the number of species contained as by the geographical position of the locality itself, and the accuracy of the determinations.

We make no comments on the correctness of the identifications in the various lists. The student can form his own estimate of them.

All lists here quoted have been personally examined unless noted to the contrary.

Notice of any omission will be very welcome.

1 *Anon.* List of Coleoptera [of Canada]. n.p., 1867, 12 p.

1131 species are listed.

2 *Austin*, E. P. Catalogue of the Coleoptera of Mt. Washington, N. H. (Proc. Bost. soc. nat. hist., 1874, v. 16, p. 265-276.)

221 determined and 13 undetermined species are listed; new species are described by Leconte.

3 *Austin*, E. P. Supplement to the check list of the Coleoptera of America, north of Mexico. Boston, 1880, 4 + 67 p.

1520 species are added to the list raising the number to 8970; many corrections in synonymy are made; includes all species described till July 1880.

4 **Beadle, D. W.** List of coleopterous insects. Collected in the county of Lincoln, C. W. (Can. nat. and geol., 1861, v. 6 p. 383-387.)

172 species are listed; some few are not fully identified; the collector was indebted to Dr. Leconte for the names of the species.

5 **Belfrage, G. W.** Price list of Texan Coleoptera. (Psyche advertiser, 1876, v. 1, 6 p.)

467 species and varieties are listed.

6 **Bell, James T.** Collection notes for 1880. (Can. ent., 1881, v. 13, p. 58-60.)

29 determined species of Coleoptera, 17 of which are new to the list of the Ent. soc. Ontario, are enumerated; 5 undetermined species are noted; all were taken at Belleville, Ont., in moss from March 1 to May 24.

7 **Bell, J. T.** List of Staphylinidae taken at Belleville, Ont. (Can. ent., 1885, v. 17, p. 49-50.)

66 determined species are listed; about 25 others are indicated.

8 **Bell, Robert, Jr.** Catalogue of animals and plants collected and observed on the south-east side of the St. Lawrence from Quebec to Gaspé and in the counties of Rimouski, Gaspé and Bonaventure. (Rep. progr. Can. geol. surv., 1858, 1859, p. 243-249.)

69 determined and 4 undetermined species of Coleoptera are listed on p. 247-249. The species were identified by Dr. Leconte.

9 **Blanchard, Frederick.** A list of the Buprestidae of New England. (Entom. amer., 1889, v. 5, p. 29-32.)

62 species are listed with notes of capture and food habits.

10 **Bland, James H. B.** Catalogue of the longicorn Coleoptera taken in the vicinity of Philadelphia. (Proc. ent. soc. Phil., 1861, v. 1, p. 93-101.)

A list of 128 species with notes on occurrence and abundance.

11 **Brodie, W.** List of Coleoptera collected by Mr. Bruce Bailey in Kicking Horse Pass, Rocky Mountains, C. P. R., 1884. (Proc. Can. inst. Toronto, 1888, ser. 3, v. 5, p. 213-215.) Separate: 3 p.

80 determined and 5 undetermined species are listed.

12 **Brodie, W. and White, J. E.** Check list of insects of the Dominion of Canada. Toronto, 1883, 67 p.

2490 species of Coleoptera are enumerated on p. 23-49.

13 **Carpenter, W. L.** Report on the alpine insect fauna of Colorado. (Rep. U. S. geol. surv., [Hayden's 7th rep.], 1874, p. 539-542.)

16 species of Coleoptera are listed.

14 **Carpenter, W. L.** Report on the alpine insect fauna of Colorado and New Mexico, season of 1875. (Annual rep. chief engineers for 1876, 1876, pt. 3, p. 521-525.) (Appendix JJ annual rep. chief engineers for 1876, 1876, p. 301-305.)

29 species of Coleoptera are listed.

15 **Cockerell, T. D. A.** Notes on the insect fauna of high altitudes in Custer county, Colorado. (Can. ent., 1890, v. 22, p. 37-39; 55-60; 76.)

29 species of Coleoptera are listed; a few are not fully identified.

16 **Couper, William.** List of Coleoptera and Diptera taken at Quebec and other parts of Lower Canada. (Trans. lit. and hist. soc. Quebec, 1864, n.s., pt. 2, p. 75-93.)

159 species of Coleoptera are listed, place and time of occurrence given; some are not fully identified.

17 **Couper, William.** List of Coleoptera taken at Quebec and other parts of Lower Canada. (Trans. lit. and hist. soc. Quebec, 1865, n.s., pt. 3, p. 27-36.)

114 species are listed; a few notes are added.

18 **Couper, William.** Anticosti Coleoptera collected on the island in 1873. (Can. ent., 1874, v. 6, p. 137-138.)

49 determined and 4 undetermined species are listed.

19 **Couper, William.** Coleoptera found in the province of Quebec. (Can. sportsman and nat. 1882, v. 2: ; 1883, v. 3: .)

Not seen; 1012 species are listed.

20 **Cresson, E. T.** Catalogue of the Cicindelidae of North America. (Proc. ent. soc. Phil., 1861, v. 1, p. 7-20.)

118 species are listed; includes Mexico and the West Indies.

21 **Crotch, G. R.** Check list of the Coleoptera of America, north of Mexico. Salem, Mass., 1873, 136 p.

7450 species are numbered, not including varieties; includes all species described till Sept. 30, 1873.

22 **Doran, Edwin W.** Catalogue of the insects of Tennessee.

Not seen.

23 **D'Urban, W. S. M.** Catalogue of Coleoptera collected by Mr. Robert Bell, 1858. (Can. nat. and geol., 1859, v. 4, p. 242-244.)

A list of 73 species collected chiefly on the south-east side of the Gulf of St. Lawrence between Quebec and Gaspé; the species were identified by Dr. J. L. Leconte.

24 D'Urban, W. S. M. A systematic list of Coleoptera found in the vicinity of Montreal. (Can. nat. and geol., 1859, v. 4, p. 307-320: 49+496.)

208 species are listed; some are not fully identified; nearly all were named by Dr. J. L. Leconte; a list of 9 species taken at Sorel but not yet met with near Montreal is appended.

25 D'Urban, W. S. M. Catalogue of animals and plants collected and observed in the valley of the river Rouge and the neighboring townships in the counties of Argenteuil and Ottawa. (Rep. progr. Can. geol. surv., 1858, 1859, p. 226-243.) (Can. nat. and geol., 1860, v. 5, p. 81-86.)

99 determined species of Coleoptera are listed on p. 233-237; several undetermined species are indicated and 34 species from L'Original and Grenville are enumerated on p. 237.

26 D'Urban, W. S. M. Catalogue of Coleoptera collected by George Barnston, Esq., of the Hon. Hudson's Bay Company, in the Hudson's Bay Territories. (Can. nat. and geol., 1860, v. 5, p. 227-229.)

88 species are listed; a few are not fully identified; Dr. J. L. Leconte furnished the list.

27 Dury, Charles. List of the Coleoptera observed in the vicinity of Cincinnati. (Journ. Cinc. soc. nat. hist., 1879, v. 2, p. 162-178.) Separate: 17 p.

1443 species and varieties are listed.

28 Dury, Charles. Coleoptera of the vicinity of Cincinnati. (Journ. Cinc. soc. nat. hist., 1882, v. 5, p. 218-220)

167 species are added to the list.

29 Dury, Charles. Notes on Coleoptera, with additions to the list of the Coleoptera of Cincinnati. (Journ. Cinc. soc. nat. hist., 1884, v. 7, p. 91-92.)

12 species are added.

30 Fay, H. T. On winter collecting. (Proc. ent. soc. Phil., 1862, v. 1, p. 194-198.)

120 species of Coleoptera are listed taken in the vicinity of Columbus, Ohio, during the winter months.

31 Fletcher, James. List of diurnal Lepidoptera and Coleoptera. (Rep. progr. Can. geol. surv., 1887-88, 1889, p. 75 J.)

21 species of Coleoptera taken on the south coast and islands of James Bay are listed.

32 Gardiner, F. Jr. Coleoptera of the White Mountains. (Psyche, 1879, v. 2, p. 211-213.) Separate: 3 p.

89 species are listed with localities and altitudes.

ON THE SPECIFIC DISTINCTNESS OF HALISIDOTA HARRISII, WITH NOTES ON THE PREPARATORY STAGES OF THE SPECIES OF HALISIDOTA INHABITING NEW YORK.

BY HARRISON G. DYAR, YOSEMITE, CAL.

As is well known, two kinds of *Halisidota* larvae inhabit the Atlantic states, differing only in color and in their food plants. Both were noticed by Harris, and the form with black hair pencils was figured by Smith and Abbot as *H. tessellaris*. In 1863, Walsh separated the forms as distinct species, indistinguishable in the imago, and gave the name *H. harrisii** to the form with

orange hair pencils that is found on the sycamore. In Grote's list of 1882, *harrisii* is given as a dimorphic larval variety of *H. tessellaris*, and so it has been considered. However, it seems to be a fact that *harrisii* occurs only on the sycamore and *tessellaris* never on that tree, so that if the former is a variety of the latter, the variation must be due to the influence of the food-plant; but I have recently observed that the larvae differ in their first stage, and it is hardly to be supposed that the food-plant would

*At first he gave the name *antiphola* to the form with black hair pencils, Proc. Bost. soc. nat. hist., IX, 288, but subsequently corrected this. Proc. ent. soc. Phil., III, 413, 430.